# Mars Exploration Science Monthly Newsletter

A publication of the Mars Program Office and the Mars Exploration Program Analysis Group (MEPAG)

February 2017

#### Mars Science News

# The final announcement has been posted for the 3rd 2020 Mars Rover Landing Site Workshop

February 8-10, 2017 @ Monrovia, CA

http://marsnext.jpl.nasa.gov/workshops/wkshp 2017 02.cfm

The 3rd landing site selection workshop for the 2020 Mars Rover mission will be held at the <u>DoubleTree Hotel, Monrovia, CA</u>, on February 8-10, 2017. The primary goal of the third workshop will be to further evaluate the eight candidate landing sites that emerged from the second workshop and reduce the number of candidate sites remaining under consideration to three or four.

Presenters at the workshop are expected to make a comprehensive, persuasive talk on why a specific site is the right one for the 2020 mission and payload, including how and where the science objectives of the mission can be accomplished. The agenda has been posted and is available for download at: <a href="http://marsnext.ipl.nasa.gov/workshops/wkshp">http://marsnext.ipl.nasa.gov/workshops/wkshp</a> 2017 02.cfm.

Additional information on the science of the eight candidate sites, and information on how the 2020 engineering constraints map to the eight candidate sites, is posted to the Background Tab of the website: <a href="http://marsnext.jpl.nasa.gov/background.cfm">http://marsnext.jpl.nasa.gov/background.cfm</a>.

Workshop connection instructions for Adobe Connect: Using any Internet Browser, go to <a href="https://ac.arc.nasa.gov/mars2020">https://ac.arc.nasa.gov/mars2020</a>. If you are a NASA employee, you can use your NDC credentials to login (just like NASA webmail). Otherwise, you can choose the option to "Enter as a Guest". Type your name in the field provided and click "Enter Room".

For audio, please dial into the following teleconference line: Telecon: I-844-467-4685 Passcode: 312989#

This connection will be globally muted, so please post questions and comments in the chatroom. We will be reviewing these for relay to the presenters as they arrive and as time permits. Kindly note that only those in physical attendance at the workshop are permitted to participate in the voting process.

#### Updated agenda for MEPAG Meeting 33

February 22-23, 2017 @ Monrovia, CA

http://mepag.nasa.gov/meetings.cfm?expand=m33

Jeffrey Johnson, MEPAG Chair, cordially invites members of the Mars science and exploration communities, including our international colleagues, to attend the 2017 face-to-face meeting of the Mars Exploration Program Analysis Group (MEPAG), scheduled for February 22-23, 2017, at the DoubleTree Hotel in Monrovia, CA. The meeting is planned for two full days, and will be webcast for those who cannot attend in-person.

Given that the transition associated with a new administration is still ongoing and that NASA is operating under a Continuing Resolution, NASA and MEPAG have agreed that discussions of possible missions beyond the currently approved 2020 Mars Rover mission be deferred to a later date. A new MEPAG meeting is being considered for mid-summer with the expectation that policy and budget plans for the future can be shared in either a virtual or face-to-face venue. The February meeting will focus on the ongoing activities of current missions whether operating or in development, reports from various conferences and analysis groups, international projects, and possible preparations leading to the next decadal survey. The revised agenda is given here.

#### 3rd Planetary Data Workshop

June 12-15, 2017 @ USGS, Flagstaff, AZ

The 3rd Planetary Data Workshop will be held in Flagstaff, AZ to cover a range of planetary data topics, including mission data availability and tools, data access capabilities, data user training, GIS, planetary mapping, PDS data, services, and capabilities. Please submit an <u>Indication of Interest</u> by Friday, February 10, 2017, to receive reminders about this meeting.

#### 9th International Radar/SAR Summer School

July 14-21, 2017 @ Haus Umboldtsein, Germany

Fraunhofer FHR, one of Europe's leading radar research institutes, which has pioneered radar and SAR research and development over the decades, is pleased to announce the 9th International Summer School on Radar/SAR, which will take place from 14-21 July 2017. We cordially invite students, PhD candidates, post-docs and anyone else eager to broaden and deepen their understanding of radar and SAR techniques to participate in our truly international summer school. Internationally renowned experts from across Europe, USA and Canada make up the summer school lecture team. This is a unique opportunity to gain an in-depth appreciation of modern radar and SAR systems whilst absorbing the multifarious atmosphere of the famous Upper Middle Rhine region. Participation in the programme of social activities with the international group of attendees will inspire and enrich your learning experience. See <a href="http://www.radarsummerschool.fraunhofer.de">http://www.radarsummerschool.fraunhofer.de</a> for further information and to download the Application form. Specific queries regarding the summer school should be addressed to: <a href="matthias.weiss@fhr.fraunhofer.de">matthias.weiss@fhr.fraunhofer.de</a>.

#### 2017 NASA Planetary Science Summer Seminar Announced

July 24-28, 2017 @ JPL/Pasadena, CA, USA, Application deadline: April 3, 2017 5pm CST

https://psss.jpl.nasa.gov/index.cfm

NASA is accepting applications from engineering students within 6-9 months of completion of their masters degree (but not planning to pursue a PhD degree), science and engineering post-docs, recent PhDs, and doctoral students, for its 29th Annual Planetary Science Summer Seminar, which will be held July 24-28, 2017 at the Jet Propulsion Laboratory in Pasadena, CA. During the program and pre-session webinars, student teams will carry out the equivalent of an early mission concept study, prepare a proposal authorization presentation, present it to a review board, and receive feedback. By the end of the session, students will have a clearer understanding of the life cycle of a space mission; relationships between mission design, cost, and schedule; and the tradeoffs necessary to stay within cost and schedule while preserving the quality of science. Applications are due April 3, 2017. Partial financial support may be available. Further information is available at <a href="http://psss.ipl.nasa.gov">http://psss.ipl.nasa.gov</a>.

## Icarus Special Issue for Mars Polar Science: Extension for Submission

Extended Submission Deadline: March 1, 2017

The Scientific Organizing Committee is organizing a special issue of Icarus related to Mars Polar research, particularly in the fields of polar geology, glaciology, climate record, atmospheric dynamics, terrestrial analogs, ground ice, geochemistry, and Mars polar surface activity. In recognition of the broad scope, interdisciplinary nature, and strong international interest in this topic, we welcome the participation of any interested scientist with relevant theoretical, experimental, or field experience. This special issue is open to all interested authors with Mars Polar related research to publish, whether they attended the conference or not. We will happily accept notices of intent (NOIs) from prospective authors.

Author guidelines for preparation of manuscript can be found at:

http://www.elsevier.com/wps/find/journaldescription.cws\_home/505620/authorinstructions

For more information, please contact the editorial office at <a href="Learus@astro.cornell.edu">Learus@astro.cornell.edu</a>, or the guest editors: Adrian Brown,

abrown@seti.org and Michael Sori, michael.sori@gmail.com.

## Near-term Due Dates (next three months)

Due	Project
February 14	2017 GSA Cordilleran Section, Abstract deadline
February 16	New views of the Moon 2—Europe, Abstract deadline
February 28	International Astronautical Congress, Abstract Deadline
March I	ICARUS Special Issue for Sixth International Conference on Mars Polar Science and Exploration, Paper submission deadline extended
March 7	Fifth International Planetary Dunes Workshop, Abstract deadline
March 16	European Geosciences Union General Assembly, Registration deadline
March 30	Dust in the Atmosphere of Mars and Its Impact on the Human Exploration of Mars, Abstract deadline
April 3	Planetary Science Summer Seminar, Application deadline
April 5	3rd Planetary Data Workshop, Abstract deadline
April 20	Accretion Building New Worlds, Indication of Interest deadline

# Upcoming Conferences and Workshops

A note about "conferences" and this calendar of events

- Missing NCTS#s (and forecasting deadline, if anomalous) can be sent to Barbara Saltzberg (Barbara.a.saltzberg@jpl.nasa.gov).
- If no deadline is noted: it is usually 90 days in advance sometimes further in advance if the conference is "Heavily Attended."
- Please do not assume our noting of NCTS# is complete. If you are unsure whether an event is a conference or not, or when the forecasting deadline may be, please consult with your NASA Center conference forecasting/travel unit.

	First Quarter, 2017
February 8-10, 2017 Pasadena, CA, USA	Mars 2020 Rover Third Landing Site Workshop  http://marsnext.jpl.nasa.gov, NCTS# 26193-17  Presenters should submit the title of their talk to John Grant (grantj@si.edu) and Matt Golombek (mgolombek@jpl.nasa.gov) by January 13th, 2017
February 22-23, 2017 Monrovia, CA, USA	Mars Exploration Program Analysis Group (MEPAG) Meeting 33 <a href="http://mepag.ipl.nasa.gov/meetings.cfm?expand=m33">http://mepag.ipl.nasa.gov/meetings.cfm?expand=m33</a> , NCTS# 28234-17
February 22-23, 2017 Atlanta, GA, USA	Outer Planets Assessment Group (OPAG) Meeting <a href="http://www.lpi.usra.edu/opag/">http://www.lpi.usra.edu/opag/</a> NCTS# 28089-17
February 27-March 1, 2017 Washington, DC, USA	Planetary Science Vision 2050 Workshop <a href="http://www.hou.usra.edu/meetings/V2050/">http://www.hou.usra.edu/meetings/V2050/</a> NCTS# 28002-17
March 4-11, 2017 Big Sky, MT, USA	IEEE Aerospace Conference https://www.aeroconf.org/, NCTS# 26165-17
March 20-24, 2017 The Woodlands, TX, USA	Lunar and Planetary Science Conference <a href="http://www.hou.usra.edu/meetings/lpsc2017/">http://www.hou.usra.edu/meetings/lpsc2017/</a> , NCTS# 26280-17
March 28-30, 2017 Washington, DC, USA	NRC's Committee on Astrobiology and Planetary Science (CAPS)

		rebruary 2017
		Second Quarter, 2017
	April 23-28, 2017 Vienna, AUSTRIA	European Geosciences Union General Assembly <a href="http://www.egu2017.eu/">http://www.egu2017.eu/</a> NCTS# 27025-17 PS8.2: Hyperspectral Data Measurements and Analysis to Support Planetary Exploration, GM1.4/PS9.5 Planetary Geomorphology
	April 24-28, 2017 Mesa, AZ, USA	Astrobiology Science Conference <a href="http://www.hou.usra.edu/meetings/abscicon2017/">http://www.hou.usra.edu/meetings/abscicon2017/</a> , NCTS# 27507-17
	May 4-5, 2017 Muenster, GERMANY	New Views of the Moon 2—Europe http://www.hou.usra.edu/meetings/newviews2017/
	May 9-11, 2017 Washington, DC, USA	Humans to Mars Summit (H2M) http://h2m.exploremars.org/, NCTS# 28099-17
	May 15-19, 2017 Boulder, CO, USA	International Conference on Mars Aeronomy (Update) <a href="http://lasp.colorado.edu/meetings/marsaeronomy2017/index.php">http://lasp.colorado.edu/meetings/marsaeronomy2017/index.php</a> , NCTS# 26278-17
	May 16-19, 2017 St. George, UT, USA	Fifth International Planetary Dunes Workshop <a href="http://www.hou.usra.edu/meetings/dunes2017/">http://www.hou.usra.edu/meetings/dunes2017/</a> , NCTS# 28521-17
	May 23—25, 2017 Honolulu, HI, USA	2017 GSA Cordilleran Section <a href="https://www.geosociety.org/GSA/Sections/cd/2017mtg/home.aspx">https://www.geosociety.org/GSA/Sections/cd/2017mtg/home.aspx</a> , NCTS# 28240-17  T16 New Developments in the Geology and Geochemistry of Mars, T17 Volcanism Across the Solar System, T18 Deposition and Diagenesis of Volcaniclastic Sediments on Earth and Mars, T19 Mars On Earth: Understanding Mars Through Earth Surface Processes
	May 30-31, 2017 Cambridge, UK	6th Interplanetary CubeSat Workshop https://icubesat.org NCTS# 27834-17
	June 6-8, 2017 Beijing, China	Global Space Exploration Conference <a href="http://www.glex2017.org/">http://www.glex2017.org/</a>
New!	June 12-15, 2017 Flagstaff, AZ	3rd Planetary Data Workshop http://www.hou.usra.edu/meetings/planetdata2017/
	June 12-16, 2017 The Hague, Netherlands	14th International Planetary Probe Workshop (IPPW-14)
	June 13-15, 2017 Greenbelt, MD, USA	I7th Meeting of the NASA Small Bodies Assessment Group (S-BAG) <a href="http://www.lpi.usra.edu/sbag/">http://www.lpi.usra.edu/sbag/</a>
	June 13-15, 2017 (corrected) Houston, TX, USA	Dust in the Atmosphere of Mars and Its Impact on the Human Exploration of Mars <a href="http://www.hou.usra.edu/meetings/marsdust2017/">http://www.hou.usra.edu/meetings/marsdust2017/</a> NCTS#28194-17
		Third-Fourth Quarter, 2017
New!	July 16-2, 2017 San Diego, California, USA	The XVIIIth International Conference on the Origin of Life
	July 24-27, 2017 Santa Fe, NM, USA	Meteoritical Society Meeting http://meteoriticalsociety.org/?page_id=18
	July 24-28, 2017 Pasadena, CA, USA	NASA Planetary Science Summer School <a href="https://psss.ipl.nasa.gov/index.cfm">https://psss.ipl.nasa.gov/index.cfm</a>
	August 22 –25, 2017 Houston, TX, USA	Accretion: Building New Worlds  http://www.hou.usra.edu/meetings/accretion2017/
	September 13-14, 2017 Washington, DC, USA	NRC's Committee on Astrobiology and Planetary Science (CAPS) <a href="http://sites.nationalacademies.org/SSB/SSB">http://sites.nationalacademies.org/SSB/SSB</a> 067577#Meetings and Events

	Thi	rd-Fourth Quarter, 2017 continued
New!	September 18-22, 2017 Jeju Island, South Korea	The 3rd COSPAR Symposium; Small Satellites for Space Research Abstract Submission is now open <a href="https://cosparhq.cnes.fr/">https://cosparhq.cnes.fr/</a>
	September 25—29, 2017 Adelaide, AUSTRALIA	68th International Astronautical Congress <a href="http://www.iac2017.org/">http://www.iac2017.org/</a> NCTS# 27783-17
	December 11-15, 2017 New Orleans, LA, USA	American Geophysical Union Fall Meeting (AGU) http://fallmeeting.agu.org/2016/2017-fall-meeting-new-orleans/

Seasons on Mars			
	MY34	MY35	MY36
Start of Northern Spring / $L_s$ 0	5/05/2017	3/23/2019	2/07/2021
Start of Northern Summer / $L_s$ 90	11/20/2017	10/08/2019	8/25/2021
Start of Northern Autumn / $L_s$ 180	5/22/2018	4/08/2020	2/24/2022
Start of Northern Winter / L <sub>s</sub> 270	10/16/2018	9/02/2020	7/21/2022

Special holidays to consi	idays to consider when scheduling conferences/workshops/meetings			
Good Friday	4/14/2017	3/30/2018	4/19/2019	4/10/20
Rosh Hashanah	9/21/2017	9/10/2018	9/30/2019	9/19/20
Yom Kippur	9/30/2017	9/19/2018	10/09/2019	9/28/20
(No	ote that Jewish holidays star	t at sundown the prev	ious evening)	
Thanksgiving Day, Canada	10/09/2017	10/08/2018	10/14/2019	10/12/20
Thanksgiving Day, U.S.	11/23/2017	11/22/2018	11/28/2019	11/26/20
Christmas Day	12/25/2017	12/25/2018	12/25/2019	12/25/20

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January-March 2017 —

Please send Mars Community Announcements and calendar items for inclusion in next month's newsletter to:

Barbara Saltzberg at Barbara.A.Saltzberg@jpl.nasa.gov.

This newsletter (and all previous months') is also posted on the MEPAG website: <a href="http://mepag.jpl.nasa.gov">http://mepag.jpl.nasa.gov</a>

- If you wish to withdraw from the electronic mailing list this newsletter is sent out to, please send an email from your email account to <a href="mailto:mepag-removesignup@jpl.nasa.gov">mepag-removesignup@jpl.nasa.gov</a>.
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